





Figure A1. Residual deviations between total study distance and maximum population pairwise FST distance scaled by total study distance ( $\text{Residual} = (\text{Study\_KM} - \text{KM\_Max\_FST}) / \text{Study\_KM}$ ).

Table A1. Data sources for genetics.

Species	Common name	Family	Genetic data	Genetics ref
<i>Abudefduf saxatilis</i>	Sergeant major	Pomacentridae	mtDNA – RFLPs	Shulman and Bermingham 1995
<i>Acanthopagrus latus</i>	Yellowfin seabream	Sparidae	mtDNA	Xia et al. 2008
<i>Acanthurus nigricans</i>	Whitecheek surgeonfish	Acanthuridae	mtDNA – RFLPs	Lessios and Robertson 2006
<i>Acanthurus nigrofuscus</i>	Brown surgeonfish	Acanthuridae	mtDNA	Eble et al. 2009
<i>Acanthurus triostegus</i>	Convict surgeonfish	Acanthuridae	allozymes	Lessios and Robertson 2006
<i>Acanthurus triostegus</i>	Convict surgeonfish	Acanthuridae	mtDNA	Planes and Fauvelot 2002
<i>Amblyglyphidodon curacao</i>	Staghorn damselfish	Pomacentridae	mtDNA – RFLPs	Bay et al. 2006
<i>Amphiprion melanopus</i>	Fire clownfish	Pomacentridae	mtDNA	Bay et al. 2006
<i>Amphiprion melanopus</i>	Fire clownfish	Pomacentridae	mtDNA	Doherty et al. 1995
<i>Amphiprion melanopus</i>	Fire clownfish	Pomacentridae	mtDNA	Drew et al. 2008
<i>Amphiprion ocellaris</i>	Clown anemonefish	Pomacentridae	mtDNA	Nelson et al. 2000
<i>Amphiprion ocellaris</i>	Clown anemonefish	Pomacentridae	allozyme	Timm and Kochzius 2008
<i>Anisotremus davidsonii</i>	Xantic sargo	Haemulidae	mtDNA	Bernardi and Lape 2005
<i>Anisotremus davidsonii</i>	Xantic sargo	Haemulidae	allozymes	Bernardi et al. 2003
<i>Arothron meleagris</i>	Guineafowl puffer	Tetraodontidae	microsatellites	Lessios and Robertson 2006
<i>Axoclinus nigricaudus</i>	Cortez triplefin	Tripterygiidae	mtDNA	Riginos and Victor 2001, Riginos 2005
<i>Bathygobius soporator</i>	Frillfin goby	Gobiidae	microsatellites	Lima et al. 2004
<i>Bellapiscus lesleyae</i>	Mottled twister	Tripterygiidae	microsatellites	Hickey et al. 2009
<i>Bellapiscus medius</i>	Twister	Tripterygiidae	mtDNA – RFLPs	Hickey et al. 2009
<i>Calotomus carolinus</i>	Carolines parrotfish	Scaridae	allozymes	Lessios and Robertson 2006
<i>Cantherhines dumerili</i>	Whitespotted filefish	Monacanthidae	microsatellites	Lessios and Robertson 2006
<i>Centropyge loriculus</i>	Flame angelfish	Pomacanthidae	allozyme	Schultz et al. 2007
<i>Chaenopsis alepidota</i>	Orangethroat pike blenny	Chaenopsidae	mtDNA	Bernardi et al. 2003
<i>Chaetodon citrinellus</i>	Speckled butterflyfish	Chaetodontidae	mtDNA	Fauvelot and Planes 2002
<i>Chaetodon quadrimaculatus</i>	Fourspot butterflyfish	Chaetodontidae	mtDNA	Fauvelot and Planes 2002
<i>Chaetodon quadrimaculatus</i>	Fourspot butterflyfish	Chaetodontidae	allozymes	Fauvelot et al. 2003
<i>Chionodraco hamatus</i>	Crocodile icefish	Channichthyidae	mtDNA	Patarnello et al. 2003
<i>Chlorurus sordidus</i>	Daisy parrotfish	Scaridae	mtDNA	Bay et al. 2004
<i>Chlorurus sordidus</i>	Daisy parrotfish	Scaridae	allozyme	Dudgeon et al. 2000
<i>Chromis atripectoralis</i>	Black-axil chromis	Pomacentridae	mtDNA	Bay et al. 2006
<i>Chromis atripectoralis</i>	Black-axil chromis	Pomacentridae	mtDNA	Doherty et al. 1995
<i>Chromis chromis</i>	Damselfish	Pomacentridae	mtDNA	Domingues et al. 2005
<i>Chromis multilineata</i>	Brown chromis	Pomacentridae	mtDNA	Rocha et al. 2008
<i>Chromis multilineata</i>	Brown chromis	Pomacentridae	mtDNA	Rocha et al. 2008
<i>Chromis xanthura</i>	Paletail chromis	Pomacentridae	mtDNA	Fauvelot and Planes 2002
<i>Chromis xanthura</i>	Paletail chromis	Pomacentridae	mtDNA	Fauvelot et al. 2003
<i>Chrysiptera glauca</i>	Grey demoiselle	Pomacentridae	mtDNA – RFLPs	Fauvelot and Planes 2002
<i>Chrysiptera glauca</i>	Grey demoiselle	Pomacentridae	allozymes	Fauvelot et al. 2003
<i>Chrysiptera rex</i>	King demoiselle	Pomacentridae	mtDNA	Bay et al. 2006
<i>Chrysiptera talboti</i>	Talbot's demoiselle	Pomacentridae	mtDNA – RFLPs	Drew et al. 2008
<i>Cirrhilabrus punctatus</i>	Dotted wrasse	Labridae	mtDNA	Drew et al. 2008
<i>Cirrhitichthys oxycephalus</i>	Coral hawkfish	Cirrhitidae	mtDNA	Lessios and Robertson 2006
<i>Clelandia ios</i>	Arrow goby	Gobiidae	allozymes	Dawson et al. 2002
<i>Coralliozetus micropes</i>	Scarletfin blenny	Chaenopsidae	mtDNA	Riginos 2005
<i>Coryphoblennius galerita</i>	Montagu's blenny	Blennidae	mtDNA	Domingues et al. 2007
<i>Craterocephalus capreol</i>	Rendahl's hardyhead	Atherinidae	mtDNA	Johnson et al. 1994

<i>Ctenochaetus marginatus</i>	Striped-fin surgeonfish	Acanthuridae	mtDNA	Lessios and Robertson 2006
<i>Ctenochaetus striatus</i>	Striated surgeonfish	Acanthuridae	mtDNA	Doherty et al. 1995
<i>Ctenochaetus strigosus</i>	Spotted surgeonfish	Acanthuridae	mtDNA	Eble et al. 2009
<i>Ctenogobiops feroculus</i>	Sandy prawn-goby	Gobiidae	mtDNA	Thompson et al. 2005
<i>Cynoscion nebulosus</i>	Spotted seatrout	Sciaenidae	mtDNA	Gold and Richardson 1998
<i>Dascyllus albisella</i>	Hawaiian dascyllus	Pomacentridae	mtDNA – RFLPs	Ramon et al. 2008
<i>Dascyllus aruanus</i>	Whitetail dascyllus	Pomacentridae	mtDNA	Fauvelot and Planes 2002
<i>Dascyllus aruanus</i>	Whitetail dascyllus	Pomacentridae	mtDNA	Fauvelot et al. 2003
<i>Dicentrarchus labrax</i>	European seabass	Moronidae	microsatellites	Bahri-Sfar et al. 2000
<i>Diodon holocanthus</i>	Long-spine porcupinefish	Diodontidae	mtDNA	Lessios and Robertson 2006
<i>Doryrhamphus excisus</i>	Bluestripe pipefish	Syngnathidae	microsatellites	Lessios and Robertson 2006
<i>Elacatinus evelynae</i>	Sharknosed goby	Gobiidae	allozymes	Taylor and Hellberg 2006
<i>Embiotoca jacksoni</i>	Black perch	Embiotocidae	allozymes	Bernardi 2000
<i>Epinephelus labriformis</i>	Flag cabrilla	Serranidae	allozymes	Craig et al. 2006
<i>Epinephelus morio</i>	Red grouper	Serranidae	microsatellites	Zatcoff et al. 2004
<i>Epinephelus marginatus</i>	Dusky grouper	Serranidae	microsatellites	de Innocentis et al. 2001
<i>Epinephelus marginatus</i>	Dusky grouper	Serranidae	allozymes	de Innocentis et al. 2001
<i>Epinephelus marginatus</i>	Dusky grouper	Serranidae	mtDNA	Maggio et al. 2006
<i>Epinephelus marginatus</i>	Dusky grouper	Serranidae	allozymes	Maggio et al. 2006
<i>Epinephelus morio</i>	Red grouper	Serranidae	microsatellite	Gold and Richardson 1998
<i>Eucyclogobius newberryi</i>	Tidewater goby	Gobiidae	mtDNA – RFLPs	Dawson et al. 2002
<i>Forcipiger flavissimus</i>	Longnose butterfly fish	Chaetodontidae	allozymes	Fauvelot and Planes 2002
<i>Forcipiger flavissimus</i>	Longnose butterfly fish	Chaetodontidae	mtDNA	Fauvelot et al. 2003
<i>Forcipiger flavissimus</i>	Longnose butterfly fish	Chaetodontidae	mtDNA	Lessios and Robertson 2006
<i>Forsterygion lapillum</i>	Common triplefin	Tripterygiidae	mtDNA	Hickey et al. 2009
<i>Forsterygion varium</i>	Striped triplefin	Tripterygiidae	mtDNA	Hickey et al. 2009
<i>Gibbonsia elegans</i>	Spotted kelpfish	Clinidae	mtDNA	Stepien and Rosenblatt 1991
<i>Gibbonsia metzi</i>	Striped kelpfish	Clinidae	mtDNA	Stepien and Rosenblatt 1991
<i>Gibbonsia montereyensis</i>	Crevice kelpfish	Clinidae	mtDNA	Stepien and Rosenblatt 1991
<i>Gillichthys mirabilis</i>	Longjaw mudsucker	Gobiidae	mtDNA	Huang and Bernardi 2001
<i>Gillichthys seta</i>	Shortjaw mudsucker	Gobiidae	mtDNA – RFLPs	Huang and Bernardi 2001
<i>Girella nigricans</i>	Opaleye	Kyphosidae	mtDNA	Terry et al. 2000; Riginos 2005
<i>Girella nigricans</i>	Opaleye	Kyphosidae	microsatellites	Terry et al. 2000; Riginos 2005
<i>Gnatholepis cauerensis cauerensis</i>	Eye-bar sand goby	Gobiidae	mtDNA	Thacker et al. 2004
<i>Gnatholepis cauerensis cauerensis</i>	Eye-bar sand goby	Gobiidae	mtDNA	Thacker et al. 2008
<i>Gnatholepis anjerensis</i>	Eye-bar goby	Gobiidae	mtDNA	Thacker et al. 2004
<i>Gnatholepis anjerensis</i>	Eye-bar goby	Gobiidae	mtDNA	Thacker et al. 2008
<i>Gnatholepis thompsoni</i>	Atlantic goldspot goby	Gobiidae	allozymes	Rocha et al. 2005
<i>Gnatholepis thompsoni</i>	Atlantic goldspot goby	Gobiidae	mtDNA	Shulman and Bermingham 1995
<i>Gobius niger</i>	Atlantic goldspot goby	Gobiidae	microsatellites	Giovannotti et al. 2009
<i>Grahamina capito</i>	Spotted robust triplefin	Tripterygiidae	mtDNA	Hickey et al. 2009
<i>Grahamina nigripenne</i>	Estuarine triplefin	Tripterygiidae	mtDNA	Hickey et al. 2009
<i>Haemulon flavolineatum</i>	French grunt	Haemulidae	allozymes	Shulman and Bermingham 1995
<i>Haemulon flavolineatum</i>	French grunt	Haemulidae	allozymes	Purcell et al. 2006

<i>Halichoeres bivattatus</i>	Slippery dick	Labridae	microsatellites	Shulman and Bermingham 1995
<i>Halichoeres cyanocephalus</i>	Yellowcheek wrasse	Labridae	mtDNA	Rocha 2004
<i>Halichoeres garnoti</i>	Yellowhead wrasse	Labridae	mtDNA	Rocha 2004
<i>Halichoeres maculipinna</i>	Clown wrasse	Labridae	mtDNA – RFLPs	Rocha 2004
<i>Halichoeres maculipinna</i>	Clown wrasse	Labridae	mtDNA – RFLPs	Rocha et al. 2005
<i>Halichoeres poeyi</i>	Blackear wrasse	Labridae	mtDNA	Rocha et al. 2005
<i>Halichoeres semicinctus</i>	Rock wrasse	Labridae	mtDNA	Bernardi et al. 2003
<i>Halobatrachus didactylus</i>	Lusitanian toadfish	Batrachoididae	allozymes	Marques et al. 2006
<i>Heteropriacanthus cruentatus</i>	Glasseye	Priacanthidae	allozymes	Lessios and Robertson 2006
<i>Heterostichus rostratus</i>	Giant kelpfish	Clinidae	mtDNA	Stepien and Rosenblatt 1991
<i>Hippocampus trimaculatus</i>	Three spotted seahorse	Syngnathidae	mtDNA	Lourie and Vincent 2004
<i>Holocentrus ascensionis</i>	Longjaw squirrelfish	Holocentridae	allozymes	Shulman and Bermingham 1995
<i>Holocentrus ascensionis</i>	Longjaw squirrelfish	Holocentridae	mtDNA	Bowen et al. 2006
<i>Hypsoblennius jenkinsi</i>	Mussel blenny	Blennidae	mtDNA	Bernardi et al. 2003
<i>Labroides dimidiatus</i>	Bluestreak cleaner wrasse	Labridae	mtDNA	Drew et al. 2008
<i>Larabicus quadrilineatus</i>	Fourline wrasse	Labridae	mtDNA – RFLPs	Froukh and Kochzius 2007
<i>Latris lineata</i>	Striped trumpeter	Latridae	mtDNA	Tracey et al. 2007
<i>Lethrinus miniatus</i>	Red throat emperor	Lethrinidae	mtDNA	van Herwerden et al. 2003
<i>Lethrinus miniatus</i>	Red throat emperor	Lethrinidae	mtDNA	van Herwerden et al. 2003
<i>Lipophrys pholis</i>	Shanny	Blennidae	mtDNA	Francisco et al. 2006
<i>Lithognathus mormyrus</i>	Striped seabream	Sparidae	allozymes	Arculeo et al. 2003
<i>Lithognathus mormyrus</i>	Striped seabream	Sparidae	microsatellites	Bargelloni et al. 2003
<i>Lithognathus mormyrus</i>	Striped seabream	Sparidae	mtDNA	Bargelloni et al. 2003
<i>Lujanus malabaricus</i>	Malabar blood snapper	Labridae	microsatellites	Elliot 1996
<i>Lujanus malabaricus</i>	Malabar blood snapper	Labridae	mtDNA – RFLPs	Elliot 1996
<i>Lutjanus campechanus</i>	Northern red snapper	Labridae	mtDNA	Gold and Richardson 1998
<i>Lythripnus dalli</i>	Blue banded goby	Gobiidae	mtDNA	Bernardi et al. 2003
<i>Macrodon acylodon</i>	King weakfish	Sciaenidae	mtDNA	Santos et al. 2006
<i>Malacoctenus hubbsi</i>	Redside blenny	Labrisomidae	mtDNA – RFLPs	Riginos and Victor 2001, Riginos 2005
<i>Mulloidichthys vanicolensis</i>	Yellowfin goatfish	Mullidae	mtDNA	Lessios and Robertson 2006
<i>Myripristis berntdi</i>	Blotcheye soldierfish	Holocentridae	mtDNA	Lessios and Robertson 2006
<i>Myripristis jacobus</i>	Blackbar soldierfish	Holocentridae	mtDNA	Bowen et al. 2006
<i>Naso brevirostris</i>	Spotted unicornfish	Acanthuridae	allozymes	Horne et al. 2008
<i>Naso unicornis</i>	Bluespine unicornfish	Acanthuridae	mtDNA	Horne et al. 2008
<i>Naso vlamingii</i>	Bignose unicornfish	Acanthuridae	mtDNA	Horne et al. 2008
<i>Naso vlamingii</i>	Bignose unicornfish	Acanthuridae	mtDNA	Klanten et al. 2007
<i>Nemadactylus macropterus</i>	Tarakihi	Cheilodactylidae	allozymes	Grewe et al. 1994
<i>Nemadactylus macropterus</i>	Tarakihi	Cheilodactylidae	mtDNA	Grewe et al. 1994
<i>Novaculichthys taeniourus</i>	Rockmover wrasse	Labridae	mtDNA	Lessios and Robertson 2006
<i>Oligocottus maculosus</i>	Tidepool sculpin	Cottidae	mtDNA	Altman and Taylor 2003
<i>Ophioblennius atlanticus</i>	Fanged blenny?	Blennidae	mtDNA	Muss et al. 2001
<i>Ophioblennius atlanticus</i>	Fanged blenny?	Blennidae	allozymes	Muss et al. 2001
<i>Ophioblennius atlanticus</i>	Fanged blenny?	Blennidae	mtDNA	Shulman and Bermingham 1995
<i>Ophioblennius steindachneri</i>	Fang toothed/large-banded blenny	Blennidae	allozymes	Muss et al. 2001
<i>Ophioblennius steindachneri</i>	Fang toothed/large-banded blenny	Blennidae	mtDNA	Riginos and Victor 2001



<i>Ostorhinchus doederleini</i> (formerly <i>Apogon</i> )	Cardinal fish	Apogonidae	mtDNA	Gerlach et al. 2007
<i>Ostracion meleagris</i>	Whitespotted boxfish	Ostraciidae	allozyme	Lessios and Robertson 2006
<i>Paralabrax maculatofasciatus</i>	Spotted sand bass	Serranidae	microsatellites	Stepien et al. 2001, Riginos 2005
<i>Paralabrax maculatofasciatus</i>	Spotted sand bass	Serranidae	mtDNA	Stepien et al. 2001, Riginos 2005
<i>Parma microlepis</i>	White-ear scalyfin	Pomacentridae	mtDNA	Curley and Gillings 2009
<i>Pholis gunnellus</i>	Rock gunnel	Pholidae	mtDNA	Hickerson and Cunningham 2005
<i>Platichthys flesus</i> L.	European flounder	Pleuronectidae	allozymes	Hemmer-Hansen et al. 2007
<i>Plectorhinchus flavomaculatus</i>	Lemon sweetlip	Haemulidae	mtDNA	Han et al. 2008
<i>Pomacentrus amboinensis</i>	Ambon damsel	Pomacentridae	mtDNA	Bay et al. 2006
<i>Pomacentrus coelestis</i>	Neon damselfish	Pomacentridae	microsatellites	Gerlach et al. 2007
<i>Pomacentrus coelestis</i>	Neon damselfish	Pomacentridae	mtDNA	Liu et al. 2008
<i>Pomacentrus moluccensis</i>	Lemon damsel	Pomacentridae	mtDNA	Bay et al. 2006
<i>Pomacentrus moluccensis</i>	Lemon damsel	Pomacentridae	mtDNA	Doherty et al. 1995
<i>Pomacentrus moluccensis</i>	Lemon damsel	Pomacentridae	microsatellite	Drew et al. 2008
<i>Pomatoschistus lozanoi</i>	Lozano's goby	Gobiidae	mtDNA	Gysels et al. 2004
<i>Pomatoschistus microps</i>	Common goby	Gobiidae	mtDNA	Gysels et al. 2004
<i>Pomatoschistus microps</i>	Common goby	Gobiidae	mtDNA	Gysels et al. 2004
<i>Pomatoschistus minutus</i>	Sand goby	Gobiidae	mtDNA	Stefanni and Thorley 2003
<i>Pomatoschistus minutus</i>	Sand goby	Gobiidae	microsatellites	Gysels et al. 2004
<i>Pomatoschistus minutus</i>	Sand goby	Gobiidae	mtDNA	Pampoulie et al. 2004
<i>Pomatoschistus minutus</i>	Sand goby	Gobiidae	mtDNA	Pampoulie et al. 2004
<i>Pomatoschistus minutus</i>	Sand goby	Gobiidae	mtDNA	Stefanni and Thorley 2003
<i>Pomocentrus pavo</i>	Sapphire damsel	Pomacentridae	mtDNA	Fauvelot and Planes 2002
<i>Pomocentrus pavo</i>	Sapphire damsel	Pomacentridae	microsatellites	Fauvelot et al. 2003
<i>Pristipomoides multidentis</i>	Goldbanded jobfish	Lutjanidae	mtDNA	Ovenden et al. 2002
<i>Pristipomoides multidentis</i>	Goldbanded jobfish	Lutjanidae	mtDNA	Ovenden et al. 2004
<i>Pseudochromis fuscus</i>	Brown dottyback	Pseudochromidae	mtDNA	Messmer et al. 2005
<i>Pterapogon kauderni</i>	Banggai cardinalfish	Apogonidae	mtDNA	Bernardi and Vagelli 2004
<i>Pterapogon kauderni</i>	Banggai cardinal fish	Apogonidae	mtDNA	Hoffman et al. 2005
<i>Pterocaesio chrysozona</i>	Goldband fusilier	Caesionidae	mtDNA	Doherty et al. 1995
<i>Scarus frenatus</i>	Bridled parrotfish	Scaridae	allozymes	Dudgeon et al. 2000
<i>Scarus rubroviolaceus</i>	Ember parrotfish	Scaridae	microsatellites	Lessios and Robertson 2006
<i>Sebastes auriculatus</i>	Brown rockfish	Sebastidae	mtDNA – RFLPS	Buonaccorsi et al. 2005
<i>Sebastes auriculatus</i>	Brown rockfish	Sebastidae	mtDNA	Seeb 1998
<i>Sebastes caurinus</i>	Copper rockfish	Sebastidae	mtDNA	Johansson et al. 2008
<i>Sebastes caurinus</i>	Copper rockfish	Sebastidae	microsatellites	Johansson et al. 2008
<i>Sebastes caurinus</i>	Copper rockfish	Sebastidae	allozymes	Seeb 1998
<i>Sebastes macdonaldi</i>	Mexican rockfish	Sebastidae	mtDNA	Bernardi et al. 2003
<i>Sebastes maliger</i>	Quillback rockfish	Sebastidae	mtDNA	Seeb 1998
<i>Sebastes melanops</i>	Black rockfish	Sebastidae	mtDNA	Miller et al. 2005
<i>Sebastes rastrelliger</i>	Grass rockfish	Sebastidae	microsatellites	Buonaccorsi et al. 2004
<i>Semicossyphus pulcher</i>	California sheephead	Labridae	mtDNA	Bernardi et al. 2003
<i>Siganus argenteus</i>	Rabbitfish	Siganidae	allozymes	Magsino and Juinio, 2008
<i>Siganus fuscescens</i>	Rabbitfish	Siganidae	allozymes	Magsino and Juinio 2008
<i>Siganus guttatus</i>	Orange-spotted spinefoot	Siganidae	mtDNA	Iwamoto et al. 2004
<i>Sparisoma cretense</i>	Parrotfish	Scaridae	allozymes	Domingues et al. 2008

<i>Sparus aurata</i>	Glithead sea bream	Sparidae	mtDNA – RFLPs	Alarcon et al. 2004
<i>Sparus aurata</i>	Glithead sea bream	Sparidae	mtDNA	Alarcon et al. 2004
<i>Stegastes fasciolatus</i>	Pacific gregory	Pomacentridae	mtDNA	Ramon et al. 2008
<i>Stegastes leucostictus</i>	Beaugregory	Pomacentridae	mtDNA	Shulman and Bermingham 1995
<i>Stegastes nigricans</i>	Dusky farmerfish	Pomacentridae	microsatellites	Bay et al. 2006
<i>Stegastes nigricans</i>	Dusky farmerfish	Pomacentridae	mtDNA	Doherty et al. 1995
<i>Stegastes partitus</i>	Bicolor damselfish	Pomacentridae	mtDNA	Hepburn et al. 2009
<i>Stegastes partitus</i>	Bicolor damselfish	Pomacentridae	allozymes	Purcell et al. 2009
<i>Stethojulis bandanensis</i>	Red shoulder wrasse	Labridae	mtDNA	Lessios and Robertson 2006
<i>Thalassoma bifasciatum</i>	Bluehead wrasse	Labridae	mtDNA	Haney et al. 2007
<i>Thalassoma bifasciatum</i>	Bluehead wrasse	Labridae	mtDNA	Haney et al. 2007
<i>Thalassoma bifasciatum</i>	Bluehead wrasse	Labridae	allozymes	Purcell et al. 2006
<i>Thalassoma bifasciatum</i>	Bluehead wrasse	Labridae	mtDNA	Shulman and Bermingham 1995
<i>Thalassoma pavo</i>	Ornate wrasse	Labridae	allozymes	Costagliola et al. 2004
<i>Thalassoma pavo</i>	Ornate wrasse	Labridae	mtDNA	Domingues et al. 2008
<i>Trematomus bernacchii</i>	Emerald rockcod	Nototheniidae	mtDNA	Janko et al. 2007
<i>Tripterygion delaisi</i>	Black-faced blenny	Tripterygiidae	mtDNA	Carreras-Carbonell et al. 2006
<i>Xiphister atropurpureus</i>	Black prickleback	Stichaeidae	allozymes	Hickerson and Cunningham 2005
<i>Xiphister mucosus</i>	Rock prickleback	Stichaeidae	microsatellites	Hickerson and Cunningham 2005
<i>Zanclus cornutus</i>	Moorish idol	Zanclidae	mtDNA	Lessios and Robertson 2006
<i>Zebrasoma flavescens</i>	Yellow tang	Acanthuridae	mtDNA	Eble et al. 2009

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Table A2. Data sources for PLD estimates.

Species	Reference
<i>Abudefduf saxatilis</i>	Brothers et al. 1983, Wellington and Victor 1989, Wellington and Robertson 2001
<i>Acanthurus nigrofuscus</i>	Wilson and McCormick 1999
<i>Acanthurus triostegus</i>	Thresher and Brothers 1985
<i>Amblyglyphidodon curacao</i>	Thresher et al. 1989, Wellington and Victor 1989
<i>Amphiprion melanopus</i>	Thresher et al. 1989, Wellington and Victor 1989
<i>Amphiprion ocellaris</i>	Timm and Kochzius 2008
<i>Anisotremus davidsonii</i>	Bernardi and Lape 2005
<i>Axoclinus nigricaudus</i>	Riginos and Victor 2001
<i>Bathygobius soporator</i>	Lima et al. 2005
<i>Centropyge loriculus</i>	Thresher and Brothers 1985
<i>Chaetodon citrinellus</i>	Fauvelot and Planes 2002
<i>Chaetodon quadrimaculatus</i>	Fauvelot and Planes 2002
<i>Chlorurus sordidus</i>	Bay et al. 2004
<i>Chromis atripectoralis</i>	Thresher et al. 1989
<i>Chromis chromis</i>	Macpherson and Raventos 2006
<i>Chromis multilineata</i>	Wellington and Victor 1989, Wellington and Robertson 2001
<i>Chromis xanthura</i>	Wellington and Victor 1989
<i>Chrysiptera glauca</i>	Wellington and Victor 1989
<i>Chrysiptera rex</i>	Thresher et al. 1989, Wellington and Victor 1989
<i>Chrysiptera talboti</i>	Thresher and Brothers 1989
<i>Cirrhilabrus punctatus</i>	Drew et al. 2008
<i>Cirrhitichthys oxycephalus</i>	Brothers and Thresher 1985
<i>Clevelandia ios</i>	Dawson et al. 2002
<i>Coryphoblennius galerita</i>	Macpherson and Raventos 2006
<i>Craterocephalus capreol</i>	Johnson et al. 1994
<i>Ctenochaetus striatus</i>	Doherty et al. 1995, Wilson and McCormick 1999
<i>Ctenochaetus strigosus</i>	Eble et al. 2009
<i>Dascyllus albisella</i>	Thresher et al. 1989, Wellington and Victor 1989
<i>Dascyllus aruanus</i>	Thresher and Brothers 1985, Thresher et al. 1989, Wellington and Victor 1989
<i>Dicentrarchus labrax</i>	FishBase
<i>Elacatinus evelynae</i>	Taylor and Hellberg 2003
<i>Embiotoca jacksoni</i>	Bernardi and Vagelli 2004
<i>Epinephelus labriformis</i>	Craig et al. 2006
<i>Epinephelus marginatus</i>	Macpherson and Raventos 2006
<i>Epinephelus morio</i>	Gold and Richardson 1998
<i>Eucyclogobius newberryi</i>	Dawson et al. 2002
<i>Forcipiger flavissimus</i>	Brothers and Thresher 1985
<i>Gibbonsia elegans</i>	Stepien and Rosenblatt 1991
<i>Gibbonsia metzi</i>	Stepien and Rosenblatt 1991
<i>Gibbonsia montereyensis</i>	Stepien and Rosenblatt 1991
<i>Gnatholepis cauerensis cauerensis</i>	Thacker 2004
<i>Gnatholepis anjerensis</i>	Thacker 2004
<i>Gnatholepis thompsoni</i>	Sponaugle and Cowen 1994, Shulman and Bermingham 1998
<i>Gobius niger</i>	Giovannotti et al. 2009
<i>Haemulon flavolineatum</i>	Purcell et al. 2006
<i>Halichoeres bivittatus</i>	Victor 1986, Sponaugle and Cowen 1997, Schultz and Cowen 1994, Wellington and Robertson 2001



<i>Halichoeres cyanocephalus</i>	Rocha 2004
<i>Halichoeres garnoti</i>	Victor 1986, Sponaugle and Cowen 1997, Schultz and Cowen 1994, Wellington and Robertson 2001
<i>Halichoeres maculipinna</i>	Victor 1986, Sponaugle and Cowen 1997, Schultz and Cowen 1994, Wilson and McCormick 1999, Wellington and Robertson 2001
<i>Halichoeres poeyi</i>	Victor 1986, Sponaugle and Cowen 1997, Wellington and Robertson 2001
<i>Halichoeres semicinctus</i>	Victor 1986
<i>Heterostichus rostratus</i>	Stepien and Rosenblatt 1991
<i>Hippocampus trimaculatus</i>	Lourie and Vincent 2004
<i>Holocentrus ascensionis</i>	Tyler et al. 1993, Shulman and Bermingham 1995
<i>Labroides dimidiatus</i>	Brothers et al. 1983, Brothers and Thresher 1985, Victor 1986
<i>Latris lineata</i>	Tracey et al. 2007
<i>Malacoctenus hubbsi</i>	Riginos and Victor 2001
<i>Myripristis jacobus</i>	Tyler et al. 1993
<i>Naso brevirostris</i>	Wilson and McCormick 1999
<i>Naso unicornis</i>	Brothers et al. 1983, Wilson and McCormick 1999, Horne et al. 2008
<i>Naso vlamingii</i>	Horne et al. 2008
<i>Nemadactylus macropterus</i>	Grewe et al. 1994
<i>Novaculichthys taeniourus</i>	Victor 1986, Victor and Wellington 2000
<i>Oligocottus maculosus</i>	Altman and Taylor 2003
<i>Ophioblennius atlanticus</i>	Shulman 1998
<i>Ophioblennius steindachneri</i>	Riginos and Victor 2001
<i>Ostorhinchus doederleini</i>	Brothers et al. 1983
<i>Ostracion meleagris</i>	Brothers and Thresher 1985
<i>Parma microlepis</i>	Curley and Gillings 2009
<i>Plectorhinchus flavomaculatus</i>	Han et al. 2008
<i>Pomacentrus amboinensis</i>	Brothers et al. 1983, Thresher and Brothers 1985, Thresher et al. 1989, Wellington and Victor 1989, Wilson and McCormick 1999
<i>Pomacentrus coelestis</i>	Thresher et al. 1989, Wellington and Victor 1989, Wilson and McCormick 1999
<i>Pomacentrus moluccensis</i>	Thresher et al. 1989, Wellington and Victor 1989, Wilson and McCormick 1999
<i>Pomatoschistus microps</i>	Gysels et al. 2004
<i>Pomatoschistus minutus</i>	Stefanni and Thorley 2003, Pampoulie et al. 2004
<i>Pomocentrus pavo</i>	Thresher et al. 1989, Wellington and Victor 1989
<i>Pterapogon kauderni</i>	Bernardi and Vagelli 2004, Hoffman et al. 2005
<i>Pterocaesio chrysozona</i>	Doherty et al. 1995
<i>Sebastes caurinus</i>	Johansson et al. 2008
<i>Sebastes melanops</i>	Miller and Shanks 2004
<i>Semicossyphus pulcher</i>	Victor 1986
<i>Siganus argenteus</i>	Magsino and Juinio-Meñez 2008
<i>Siganus fuscescens</i>	Magsino and Juinio-Meñez 2008
<i>Sparus aurata</i>	FishBase
<i>Stegastes fasciolatus</i>	Thresher et al. 1989, Wellington and Victor 1989
<i>Stegastes leucostictus</i>	Wellington and Victor 1989, Wilson and McCormick 1999, Wellington and Robertson 2001
<i>Stegastes nigricans</i>	Thresher et al. 1989, Wellington and Victor 1989
<i>Stegastes partitus</i>	Wellington and Victor 1989, Wilson and McCormick 1999, Wellington and Robertson 2001
<i>Stethojulis bandanensis</i>	Victor 1986
<i>Thalassoma bifasciatum</i>	Victor 1986, Schultz and Cowen 1994, Sponaugle and Cowen 1997, Wilson and McCormick 1999, Wellington and Robertson 2001
<i>Thalassoma pavo</i>	Macpherson and Raventos 2006
<i>Tripterygion delaisi</i>	Macpherson and Raventos 2006
<i>Zanclus cornutus</i>	Thresher and Brothers 1985
<i>Zebrasoma flavescens</i>	Wilson and McCormick 1999

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